This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-10 (currently cancelled)

11. (original) A semiconductor processing method, comprising:
contacting a semiconductor wafer with a solution comprising a component to be monitored;
controlling the concentration of the component by a method comprising:
performing an absorption spectroscopy measurement on a sample of the solution; and
controlling the concentration of the component in the solution based on the absorption spectroscopy measurement using a feedback control loop.

12. (original) The method according to claim 11, wherein the component to be monitored is a corrosion inhibitor.

13. (original) The method according to claim 12, wherein the corrosion inhibitor is benzotriazole, tolyltriazole, imidazole, triazole, benzothiazole, mercaptobenzotriazole, hydroquinone, gallic acid, pyragallol, catechol, recorsinol, or a combination thereof.

14. (original) The method according to claim 11, wherein the concentration of the component in the solution is controlled by adjustment of the amount of the component introduced into the solution.

15. (original) The method according to claim 11, wherein the concentration of the component in the solution is controlled by adjustment of the amount of a diluent introduced into the solution.

16. (original) The method according to claim 11, wherein the absorption spectroscopy measurement is a UV/visible light spectroscopy measurement.

17. (original) The method according to claim 11, further comprising transporting the sample of the solution using a pump.

18 – 24 (currently cancelled)

25. (original) A semiconductor processing system, comprising:
a chemical bath tank containing a solution for treating a semiconductor substrate;
one or more conduits for introducing process materials into the chemical bath, the process materials comprising a component to be monitored;
an absorption spectroscopy measurement apparatus for measuring the concentration of the component in a sample of the solution; and
feedback control means for controlling the concentration of the component in the solution based on the absorption spectroscopy measurement.

26. (original) The system of claim 25, wherein the absorption spectroscopy system comprises a plurality of measurement cells.

27. (original) The system of claim 25, further comprising means for directing the sample to an appropriate measurement cell depending on the concentration of the component to be monitored in the sample.

28. (original) The system according to claim 25, wherein the component to be monitored is a corrosion inhibitor.

29. (original) The system according to claim 28, wherein the corrosion inhibitor is benzotriazole, tolyltriazole, imidazole, triazole, benzothiazole, mercaptobenzotriazole, hydroquinone, gallic acid, pyragallol, catechol, recorsinol, or a combination thereof.

30. (original) The system according to claim 25, wherein the absorption spectroscopy measurement system is a UV/visible light spectroscopy measurement system.

31. (original) The system according to claim 25, further comprising a pump disposed between the chemical bath tank and the absorption spectroscopy measurement apparatus.